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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,694	07/05/2001	Eberhard Frolich	P6338.7US	3482

30008 7590 05/23/2003

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EXAMINER
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PHAN, THIEM D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 05/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/899,694

Applicant(s)

FROLICH ET AL.

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☒ Claim(s) 15-20 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The amendment filed in Paper No. 5 (filed 3/03/03) has been fully considered and made of record.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Whetstone (US 4,025,379) hereinafter '379.

**As applied to claim 15**, the '379 teaches a method of making laminated magnetic material, comprising:

- joining laminations to be shaped in ultimate product form (Cf. Fig. 2, element 10; column 5, lines 51 & 52),
- deburring the laminations after being joint (Cf. column 5, lines 54-56).

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the '379 in view of Stark (US 5,563,463) hereinafter '463.

The '379 teaches a method of producing laminated magnetic core which meets all of applicants' claimed limitations including the deburring and shape-deformation. The '379 do not teach the tool parts that move toward the lamination for press-fit.

The '463 teaches a press-tool of tubular shell to press against the core in a common cylinder mandrel (Cf. Fig. 11a & 11b; column 16, lines 9-14) to an ultimate shape which is made of solid core laminations (Cf. column 7, line 15; column 8, line 63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the '379 with the '463 and to modify the method of '379 by applying the press-tool of tubular shell as taught by the '463 in order to ensure a fully press-fit laminated core for better magnetic characteristics.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the '379.

The '379 teaches a method of producing laminated magnetic core which meets all of applicants' claimed limitations, including the joining of laminations along the longitudinal edges to form a solid core (Cf. Fig. 1) except for the plastically deforming of the laminated cores.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to plastically deform the laminated core since it was known in the art that the core laminations are deformed (Cf. column 5, lines 51-54) to an ultimate shape.

7. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '379 in view of the '463.

**As applied to claim 18**, the '379 teaches a method of producing laminated magnetic core which meets all of applicants' claimed limitations including the deburring and shape-deformation. The '379 does not teach the shape-deforming of the core laminations on a common cylinder mantle surface.

The '463 teaches a press-tool of tubular shell to press against the core in a common cylinder mandrel (Cf. Fig. 11a & 11b; column 16, lines 9-14) to an ultimate shape which is made of solid core laminations (Cf. column 7, line 15; column 8, line 63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the '379 with the '463 and to modify the method of '379 by applying the common cylinder mandrel as taught by the '463 in order to ensure a fully press-fit laminated core for better magnetic characteristics.

**As applied to claim 19**, the '463 teaches the step of moving the tool parts toward the core laminations (Cf. Fig. 10 & 11a, element 164).

**As applied to claim 20**, the '379 and '463 teach the claimed invention, including the step of moving the tool parts toward the core laminations (Cf. the '463, Fig. 10 & 11a, element 164) except for disclosing the press-fit of the plastically deformed laminations to fill the empty space of the enclosed cylinder tool.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to press-fit the plastically deformed laminations to fill the empty space of the enclosed cylinder tool since it is known in the art that the laminated core is press-fit and deburred into its ultimate shape (Cf. the '379, column 5, lines 51-55).

***Allowable Subject Matter***

8. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Claim Allowed*

9. Claims 1-14 are allowed.

*Response to Arguments*

10. Applicants' arguments with respect to claims 15-21 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3729

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 703-605-0707. The examiner can normally be reached on Monday - Friday, 9AM - 5PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter VO can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

TP

Tim Phan  
Examiner  
Art Unit 3729

tp  
May 16, 2003

  
**CARL J. ARBES**  
**PRIMARY EXAMINER**